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"Our Home, our Country, and our Brother Man."

BEEF LEAVES GOOD FOOD FOR BEET ROOTS.

The idea of manuring land for crops by ploughing under a part of the crop is not new, but at the same time the system has not been sufficiently tested by any systematic course of experiments in order to give undeniable facts on which the cultivator may rely.

We know of some farmers who plough under all of their corn crop but the ears, which they gather in the field. In this way they believe that they keep up the fertility of their soil to a point sufficiently high to enable them to raise another crop of corn equally as good as the first, and perhaps better.

We find in the Plough, Loom and Anvil, for March, remarks respecting the mode of cultivating the beet crop practised by Mr. Reeves of England. Mr. R. has adopted a rotation of crops in which the beet figures as one of the principal crops, and the manuring consists principally of the beet leaves, which are cut off when the crop is gathered in the fall, and ploughed under. He contends that the beets raised in this way are healthier, and every way better, than if manured by large quantities of animal or compost manures. He says that he considers their very succulent and susceptible foliage injured by the evaporation of the manures used for their growth; for, although the air and support enter every part of the plant, the chief admission (of the beet tribe) is through their leaves. The leaves of the beet are perhaps more succulent than those of any other plant in cultivation. Air vessels are found in the leaves of all vegetables, but in the beet family are more readily discovered, and there is no doubt that air is inhaled by vegetables and adds abundantly to their substance, for it supplies the phosphates most suitable to the plant.

Again he says—Beet is considered to be an exhausting crop, but it is not so if its principal food is supplied by atmospheric agency, and by ploughing into the ground the immense quantity of leaves, containing the natural food for future absorption; thus returning to the earth much, very much of the natural ingredients and properties of the plant.

From the action of this principle, it may be deduced that in every three or four years, whatever the course of system may be for fallow, for rest, or otherwise, a good crop of either beet or mangold wurtzel may be produced without the formidable outlay which has hitherto proved so discouraging in the culture of these valuable crops.

He also says—The beet may be considered an attractor to the various atmospheric agencies, as may be verified by its chemical contents. Manure may be applied to whatever crop you desire; but for a fine, healthy crop of beets or mangold wurtzel, unincumbered by a quantity of forks or fibres, it is best to leave the chemical productions of the earth and atmosphere to form its chief feeding and nourishment; and, although I believe the third or fourth course system (rotation), as that which would take in a proportionate part of a farm annually for this product, is best, I have little doubt that by constantly burning the leaves in the earth, a fair crop of beet and mangold wurtzel would be produced alternately on the same land.

Mr. Reeves believes that twenty-five years experience in the culture of this crop warrants him in making the above assertions, and he gives the following table showing the results of this culture with him, in 1851:

	Tons.	Cwt.	Lbs.
White Silesian, per acre, 38	17	96	
Orange Globe, " 32	18	16	
Rose Pink, " 31	10	9	
Mangold Wurtzel, " 39	13	6	

Mr. R. instituted experiments to ascertain whether beets cultivated in this manner contained as much saccharine matter as those that were highly manured with barn-yard manure. The result was, that they contained more than the latter did. He also found that wheat succeeded well as a crop after beets, with no other dressing than the leaves ploughed under, and he concludes his remarks by saying "We thus insure, then, the fact that beet roots may be grown every season on the same piece of land—the foliage of the produce of one season being a natural nourishment for the plant of the following season, and to facilitate this process I would suggest that trenches be dug out between the roots of plants, and when the crop is taken up and trimmed, to bury the leaves in the trenches and fill them up with earth—these trenches to be considered the line for the succeeding crop, thus offering an abundant supply of the food and properties necessary for the next produce."

We think Mr. R.'s plan must be taken in this country with some allowance, though we have no doubt the mode recommended of using the leaves for future crops would be highly advantageous.

NEW MODE OF DISTINGUISHING THE RACES OF MEN.

The question of the unity of the human race is exciting discussion at the present day. Different theories prevail, some basing their theories on one suite of facts and others on different facts.

Mr. P. A. Brown of Philadelphia, has adopted a unique course to satisfy himself upon this question, and has come to the conclusion that there are three distinct races, and that the many varieties are merely crosses of these three.

He has made a collection of locks of hair of the heads of persons of all nations, races, and varieties, and we see by a communication of his, published in the last number of the "Wood

Grover," that from an examination of many of these he has been enabled to determine that there are, in the various parts of the globe, three distinct species of men, viz.—the cylindrical, the oval, and the eccentrically elliptical, besides a great variety of sub-races, formed by the union of two or more species.

Mr. Brown is anxious to obtain specimens of the hair and wool of different people and of different animals.

If you are in doubt to what race you belong, send him a lock of your hair, and he will determine the question for you at one peep of his microscope.

For the Maine Farmer.

THE NORTHERN SPY APPLE.

This is a first rate winter fruit, large and handsome, though by some to have no equal. The Editors of the New England Farmer recently acknowledged the reception of two boxes of this fruit, one raised in Rochester, N. Y., the other in the "cold New England climate, larger, fairer, and much higher colored than the western apples." The late W. G. Lake of Topsfield, who raised the best sample alluded to, says—

"I am confident that it will do well with us in our northern climate. The tree in the nursery is a very strong and handsome upright grower, rather long jointed, but as it grows older the hard thickens up, making it one of the handsomest trees grown. I have two hundred of them set in my orchard now, five years from the bud. The apple grown with us is much heavier and finer, and keeps better than it does grown in New York. I do not consider it in prime eating condition until May, and then I think it the best apple I have ever eaten. It will keep well until July." He is of the opinion with others who have fruited them, that they require a strong, rich soil, and from what information we are able to obtain in connection with our own observation, we need not expect them to be as prolific as the Baldwin; yet the superiority of the fruit, late keeping, and hardness of the tree, may more than compensate for the difference of cultivation required. The past winter was one of unusual severity to fruit trees in the nursery, destroying many of our Baldwins and other varieties; and the Northern Spy, standing in rows by their side within four feet of Baldwins, remained almost entirely without injury.

They possess one advantage over any other kind with which I am acquainted; that is, being about ten days later in putting out in the spring, making the risk much less of injury from late frosts.

D. TARR.

Vassalboro', 24 mo., 1853.

For the Maine Farmer.

GRAFTING LADDER.

Mr. Editor—Dear Sir: While writing on business, I thought I would give you a description of my grafting ladder, as it differs somewhat from any I have seen, and in my judgment, for many purposes is an improvement on any I have ever heard of. It is twelve feet long, one foot wide, and made in this wise: The side pieces (of mine are of poplar, (any light and strong wood is suitable), and should be two inches deep, and one inch and a half thick. The slats, or rungs, if you choose to call them so, are seven-eighths of an inch thick, made of some material, and rather more than an inch wide. I bored the holes in one slat, and bored the others by passing the bit through the holes in the first one, so as to have them all of the same length between the holes, in order that I could shut my ladder together and open it at pleasure. The slats may be put such distance apart as shall suit the convenience of the owner. Mine form a square when the ladder is open. The slats are riveted on the edge of the side pieces with rivets (screws are not safe, as they are partly cut off in forming the screw) made from horse nail rods, and a small rivet is put in the end of each slat to keep it from splitting on the top. I have iron hooks riveted one on each side. They are made as light as they can be, and yet be safe, and they form a half circle, and are sharp enough to hook on to a window-sill, barn, or any other like substance; so that, if need be, you may go up the side of a building with perfect safety. You may likewise go on a roof with ease and safety. For grafting and trimming trees, I think it will commend itself, as you can stand it on uneven ground, while the top end will accommodate itself to the inequalities and crooked places; and if the tree be high and large, you may hook it on to the high limbs after you have gone into the tree, by taking it up after you, and in this way save the time and strength necessary to move a heavy ladder, such as most people use.

A ladder made in this way will be found very strong, and will shut together so that you can pass the top into a tree while it is shut up, hook on to a limb, while the body of the ladder is supported amongst the limbs, and be quite safe. If any one has a ladder better suited to the purpose of trimming and grafting trees, Mr. Editor, I should like to hear from him through the Maine Farmer; as grafting has been my employment for many years in its season, and will be, probably, while I am able to do it, in time to come.

WILLIAM BURNS.

Upper Gloucester, March 14, 1853.

For the Maine Farmer.

REMEDY FOR THE OX WORM.

Mr. Editor—A communication relative to the worm in onions, and with your permission, I will relate a little personal experience with regard to this troublesome insect.

I have found, by repeated experiments, that the common poppy, (*papaver somniferum*), the seeds being sown with the onion seeds, will prevent the attacks of the worm. My method has been, as the poppies become so numerous or large as to prevent the growth of the onions, to weed up a part of them, leaving the uprooted stalks near the bed. Perhaps you have some attentive readers of the other sex, who take writers are pleased to denominate us; or rearing a pleasure in transplanting a cabbage or raising a useful beet, as well as pruning a cactus or tying up the leaves of a lily. If so I should like to have them try this experiment.

Respectfully yours, A FARMER'S DAUGHTER.

Temple, March 15, 1853.

For the Maine Farmer.

WHAT CROPS AMONG FRUIT TREES?

Mr. Editor—I have about an acre of ground set with young fruit trees. I want to keep this ground in suitable condition for their rapid growth. In Cole's Fruit Book it is stated that "Root crops and vines generally are favorable" for that purpose, and that "corn and smaller grain, and crops generally that ripen their seeds, injure trees." My bees are here located, and it is the only convenient location I have for them. They would be troublesome to man and beast in cultivating a root crop, as such a crop would require considerable labor among them at a season of the year and time of day when they are most active. Now what I wish to learn is, what crops requiring but little labor, would best accomplish my object. I have thought of peas and of buckwheat, both to ripen before harvesting, and of oats and peas together, to be cut before ripe for fodder, and of laying it down to grass. Will you, in your useful paper, please give my opinion of what crop or crops will answer my purpose best, for a series of years, to be matured annually?

Cole, March 15, 1853.

Nursery.

We have found beans (the low bush variety) to be an excellent crop, using among other dressing, plenty of ashes, plaster, muck, &c.

Buckwheat would be useful to the bees, and not very exhaustive. If laid down to grass, keep a circle around each tree covered with muck, which makes an excellent substance for mulching, and ashes will help decompose it and fit it for nutriment to the trees.

Ed.

For the Maine Farmer.

PREVENTIVE OF FALLING OF THE WITHERS IN COWS.

Dr. Holmes—Knowing that there are many cows that are troubled with casting their withers, and our farmers often lose them in consequence, and knowing, also, a sure remedy, I feel it my duty to give it to the public through your paper. The remedy is to feed them freely on beets, two or three weeks previous to calving. I bought a cow that had been troubled in that way two or three times before I bought her, and tried the experiment and found it a sure remedy. It is good, also, for other difficulties of weakness, about the time of calving.

B. S. GERRY.

Dover, March 9, 1853.

For the Maine Farmer.

HOW TO MAKE MANURE.

The Massachusetts Agricultural Society's Report gives the following statement from a farmer of Hampshire County of that State: "I immediately after planting in the spring, and after I have used what manure I want, I commence my compost heap for the next season. Into a convenient place, which with me is a hollow in the angle of a bank wall on the south end of my buildings, I deposit first a load of horse manure. Over this I usually spread the scrapings of my wood yard cellar, especially in May, and all other substances that will make manure, that I find about my buildings, such as the rakings of the yard, old leaves, &c., making in all another small load. Over this I add a load of loam, then over the whole I spread about a bushel of ashes. For the next three or four weeks this heap receives from the wash-room all the soap suds and washing water, and from the house all the useless soaps and washings of the kitchen, sweepings, &c., being kept continually moist. In about four weeks the first deposit, I add another load of horse manure, more loam and sand from the washing of road drains spread over the horse manure, and over all a layer of wood ashes, occasionally adding more during the next four weeks. Receiving as before all the fertilizing substances that accumulate in the wash-room and kitchen. This process is continued during the summer and fall, until snow covers the ground, then I call my heap finished, only as it continues to receive, during the winter, washings, slops, &c.

"I claim for this manure the following advantages: First it is cheap. Horse manure alone is a miserable fertilizer, and this, excepting the wood ashes, is the only substance of any value that enters into the composition. Combined in the way stated, it helps to form a valuable manure. Again, as a matter of cleanliness and convenience, this compost heap is of great advantage. How often do we see about farm-houses and farm-yards accumulations of substances rendering the premises filthy and unsightly. The compost heap receives all these otherwise useless accumulations."

SMALL FRUIT. Plant out cuttings of grapes, gooseberries, currants, &c., as early as practicable, and if they have been kept in a moist place during the winter, and are plump and well conditioned, they will soon make roots. Those of the gooseberry and currant should have all the eyes removed, except three or four at the top, as by this means they will produce on single stalks and throw up no suckers. Grape cuttings should be planted two eyes out, and all cuttings should be partially shaded, or they will not take root with certainty. This is particularly true with the grape.

Currents, gooseberries, and grapes, two years from the cuttings, should now be transplanted in place, and in putting them out, be sure not only to dig the holes as large as you intend the roots to expand, but also to a depth of at least two feet, filling up the space previously occupied by the subsoil with good earth. Manure freely, but not with fermenting manure; for small fruits it should either be well disintegrated with muck or charcoal dust, or of a quality not liable to heat. The gooseberry is a rank feeder, as well as the raspberry, and is capable of appropriating large amounts of animal manures to its use.

STRAWBERRIES. Clean, dress and fork the beds.

GRAPE VINES. Loosen the earth about their roots and give them manures. Swamp muck which has been decomposed by the salt and lime mixture answers a good purpose. Whole bones buried near the roots of grape vines will soon be appropriated, and, during the summer rest, a little potash water will hurry up their action.

QUINCE. Do not believe the old story that quinces will take care of themselves. Manure them well if you want fair fruit.

[Mapes' Working Farmer.

TRANSPLANTING FRUIT TREES.

We copy the following from a catalogue of S. L. Goodale's Nursery, in Skow. We have a few copies of this catalogue, which we shall be pleased to distribute among those who may wish for them. Mr. Goodale is well known as a most successful horticulturist, and his nursery is well stocked with the choicest varieties of fruit and ornamental trees.

The following remarks are reasonable, and will be read with interest.

NOTE. The soil for fruit trees should be either naturally or made so by thorough drainage, for they cannot thrive in any soil which retains stagnant moisture. It should be deeply dug and pulverized or twice ploughed, the second time being followed by the subsoil plow, and enriched by plenty of well decomposed or compost manure.

PREPARATION. Prepare the trees by cutting off smoothly the end of each root, taking away any bruised portions. A finger chopped with a spade may as well be expected to heal kindly as a root so treated; both are portions of organized tissue, and subject to the laws of life. Dig large holes—spread the roots in their natural position without bending or crowding—let one person hold the tree and another fill in carefully and thoroughly with fine surface soil, bringing every root into close contact with it, and leaving no vacancies which cause mould and decay. Let no manure touch the roots, unless very old and well incorporated with the soil. Rank manure is little better than poison. Roast beef and porter would probably throw a wounded man into a fever and endanger his life, but let his wounds heal and he may adopt such a regimen with safety and gain strength upon it.

DEPTH. As a general rule, trees should be planted at the same depth as they stood in the nursery, or not more than an inch lower; but to this rule an exception must be made in the case of Dwarf Trees, which should be planted so that the junction between the pear and quince shall be just one inch below the surface when the planting is finished, without reference to the height at which they budded or grafted in the nursery. If so planted and properly mulched the quince will emit roots close to the junction, and these will soon become the main roots, and thus the tree grows vigorously. Leaving any portion of the quince above the ground is objectionable for many reasons.

HEADING IN. The roots of a tree being necessarily shortened in lifting, however carefully it may be done, (the small roots usually extend far as the branches), the top should be shortened enough to restore the balance. A safe rule is to cut in the last year's growth (on Standard and Dwarf Standards) to three or four buds. This to the novice seems like going backward, but it is in fact the best way to get forward, for it so lessens the demand on the roots that the remaining buds grow vigorously, and soon the tree is larger and healthier than if planted with the top entire.

MULCHING. When the tree is planted by no means forget or neglect to mulch it, by laying around, four feet in width and four feet in depth, a covering of some kind. Rough manure is best; but leaves, refuse hay, straw or sawed answer for a purpose, and even spent tan or sawdust is better than nothing. Such a covering preserves uniformity of temperature and moisture about the roots, and its value is in little danger of being over estimated.

IF DAMAGED. In case trees are received during cold weather, or have been frozen in the packages, place them unopened in a cellar or other moderately cool place—if thawed very gradually they will not sustain serious injury. If they come to land and dry, bury them, tops as well as roots in moist earth for a week, or until the wood is fully plump, when they may be planted, shortening the tops rather more than if they arrived in good order. We have had trees so dry as apparently to be fit only for kindling wood, fully restored in this way. A transplanted tree is in a condition somewhat analogous to that of a man maimed by accident and removed to a strange place for assistance. It would be an easy matter to despatch him in various ways; but he should receive careful and judicious treatment, and when his wounds heal, a generous diet; so it is an easy matter to bruise, scorch, starve, or drown a tree, but no consideration man will do either.

SEASON. The question is often asked whether spring or fall be the better time for planting. For most fruit and ornamental trees in this climate spring is preferable, and as early as the land is fit to work for a crop. Trees of large size and some of the small fruits as currants, gooseberries, &c., also hardy roses, and herbaceous plants are set with best success in autumn. The character of the soil should be taken into consideration, as in light and dry soils autumn planting succeeds better than in heavy loams. Trees planted in autumn should have a hillock of earth piled around them, to be removed in spring and replaced by a mulch.

AFTER CULTURE. Where a tree is well planted, its culture only well begun—keep the soil loose and light and free from weeds or grass. Bestow an annual supply of food, and once a year at least wash the trunk and limbs with whitewash. If orchards must be laid down to grass, wait until the roots are well grown, and if by demand of the soil hay and fruit, manure it for both crops.

LABELS FOR FRUIT TREES. We have found the following recipe, taken from an English work, to make an indelible ink, for writing on Zinc, and not on affected by the weather: cut up the common sheet zinc into strips about half an inch wide by two or three inches long, and write with a quill pen. The zinc should previously be made bright. Through a hole at one end introduce a thin copper wire, long enough to encircle a branch or limb, and it will remain for years, giving to the owner of a newly planted orchard the satisfaction of knowing, at all times, his varieties. Care in respect to labels would obviate much of the confusion in all parts of the country, as to correct nomenclature. "Take 1 drachm of verdigris, 1 drachm salt ammonia powder, and half a drachm lamp-black, and mix with 10 drachms of water." Shake before using.

TO RAISE BARLEY.

First let the land be in tolerable good order, i. e., not too poor, or worn out too much. Plow and harrow it until it is well pulverized, and then sow a bushel or five pecks to the acre, and harrow it in. The practice, in my native country, England, is "not to sow barley till you can sit down on a clod, without danger of taking cold," which, in that country, is about the beginning of April, and I suppose, in the neighborhood of Lexington, the same time will do.

When the barley is ripe, cradle it, and treat it exactly as you would oats, and, I believe, this is all that is necessary to respecting the raising and harvesting the crop. A few observations on the subject of the advantages of the culture of this grain may be advantageously added. It is a crop that will stand the drought better than corn, which, in my opinion, fits it well for a staple crop for the South. It makes better bread than either rye or corn, and if ground into meal, will fatten hogs equally as well. The practice in England, is to sort out the small potatoes, and boil them, and then beat them up and mix barley meal with them, and feed them to the fattening hogs.

Great quantities of barley are raised there, and used for making malt, and for other purposes. If their land is considered too poor, they sow turnips on it, and the next winter, pen the sheep on small portions of the land, and as soon as they have eaten up all the turnips on that portion, remove the pen, and so on till they have been penned all over the field. A two-fold advantage is thus gained: the sheep are wintered and fattened, and, at the same time, the land is well manured. The practice is then to plow up the ground, as above directed, for barley, in the spring. Should any one be induced to try the experiment, I would advise him to sow the Sweet Turnip, or ruta-baga, and sow them by the 20th of June, at least. This sort is more hardy, and more nutritious than the white turnip, and, if the ground is frozen, they must be stocked up with a grubbing hoe.

I have never seen but one small crop of barley raised in the United States, and I can not tell now what the yield was; but I know the man who raised it, considered it a profitable crop. I have understood that considerable quantities of it are raised on Long Island, where they harvest it exactly as they do the oat crop.

[Dollar News.

MASTIC CEMENT.

We have had many inquiries lately respecting the mastic cement for covering the fronts of houses and giving them the appearance of brown freestone. We have endeavored to find out its composition, and have at last, we believe, obtained reliable information respecting it. Red lead, oil, sand, and lime-stone dust, in some form cover every compound of it. 50 parts by measure of clean dry sand; 50 of limestone (not burned) reduced to grains like sand, or marble dust, and 10 parts of red lead, mixed with as much boiled linseed oil as will make it slightly mastick, compose a mastic cement. The building of brick to receive it should be covered with three coats of red lead oil laid on with a brush, and all suffered to dry before the mastic is put on. It is laid on with a trowel, like plaster, but it is not so moist. It becomes as hard as stone in the course of a few months. Care must be exercised not to use too much oil—although no evil will be the result—excepting that the cement will require longer exposure to harden. The oil prevents rain and moisture penetrating, and this is the reason why this mastic is not affected by the weather. Various compositions will answer about as well as the receipt above. We will present a few.

100 parts (by measure) of clear dry sand; 100 parts of powdered limestone; and 5 of red lead, made a hard mastic; this may be varied with the addition of 10 parts of red lead. 100 parts of sand, 50 parts of whitening and 10 of red lead make a moderately hard cement. 100 parts of the plaster of Paris (or the same of marble dust, 10 parts of red lead, and 5 parts of yellow ochre, make a very beautiful and hard cement. As stated before, all of these compositions must be moistened with boiled linseed oil. The quantity of oil is so very small in proportion to the other materials, that the whole mass is very porous. The oil unites the particles together, it is the adhesive agent. The sand, &c., must be perfectly dry before they are mixed together; that is, they must be subjected to heat in an oven to drive off all the water contained in them. The sand should not be too coarse and should be passed through a fine sieve. Various coloring substances may be employed to mix with the above composition, such as any of the pigments used in oil painting. We would never use less than ten parts of red lead in the cement.

The above compositions might be moulded into statues and works of art, by oiling the patterns inside, before putting in the composition, and allowing the mastic to harden in the moulds before it is removed. Two ounces of resin pounded very fine should be added for every pint of oil used. The whole must be mixed with great care to make the cement properly.

[Scientific American.

DISEASED UDDER. If there is heat and tenderness about the udder, the part should be fomented with warm water twice a day and a little camphor ointment rubbed on afterwards. If there is hardness without heat, then rub on once a day to the hard swellings the following ointment: hydrate of potash, 1 drachm; lard, 1 oz.; mix. Two teats will not yield the same amount of milk as the whole four, although more than half. If both teats are lost, feed the cow, if she will for feeding. It often happens that after calving, the milk does not flow in one or two teats, but afterwards a passage takes place. [Exchange.

GALTS FRONTIER HARNESS OR SADDLE. Major Long in his written and valuable account of his expedition to the Rocky Mountains, says that his party found white lead moistened with milk, to succeed better than any thing else in preventing the bad effects of galls on their horses' backs, in their fatiguing march over the plains that border the mountains. Its effect in soothing the irritated and inflamed surface was admirable.

[American Farmer.

MARCH BIRDS.

BY ERNEST W. ELLSWORTH.

Though blasts of March are roaring high, And clouds run races through the sky, And weathercocks are vexed to know Which way to point the winds that blow, And in the snow drift on the hill Winter is hid in ambush still, Then, little bird, with faithful wing, Hasten thy life upon a Spring—Hast come, so full of faith possessed, Winds rattle but thine enter breast.

Because last year thy nest was there, Thy song is of a quiet tune, Unto the halcyon days of June. My life has many a gusty sigh, To blow the clouds of memory; And my poor brain is vexed to know Which way my feet had better go; And, in a venture white and chill, Sorrow is hid in ambush still; But still my heart shall strive to sing, And stake its life upon a Spring. My heart, with constant faith possessed, Shall keep a quiet inner breast. In season haunts, though blown and bare, Because its last year's love was there, My heart shall sing a quiet tune Unto the halcyon days of June.

HOW TO MAKE ONE FARMEQUAL TO THREE.

G. T. Stewart, Esq., in a recent Address before the Ohio Agricultural Society thus speaks on this subject:

Many farmers who are destroying the productiveness of their farms by shallow-work, as they find that their crops are diminishing, think only of extending their area by adding acres of surface, as if they supposed that their title deeds only gave them a right to six inches deep of earth. If they will take those deeds, study their meaning, and apply the lesson to their fields, they will soon realize in three-fold crops the fact that the law has given them three farms where they supposed they had but one—in other words, that the subsoil brought up and combined with the top-soil and enriched with the atmospheric influences, and those other elements which agricultural science will teach them to apply to their ground, will increase three-fold, the measures of its productiveness. To show to what extent the fertility of the soil can be increased, I refer to a statement in the last Patent Office Report. In the year 1850, there were nine competitors for the premium corn crop of Kentucky, each of whom cultivated 10 acres. Their average crop was about 122 bushels per acre. At that time the average crop of wheat per acre in the harvests of Great Britain, on a soil cultivated for centuries, is about double that produced on the virgin soil of Ohio. Why is this? Simply because British farmers are educated men, and apply work wisely. They pay back to the earth what they borrow; they endeavor by every means in their power, to enrich their ground, and in return it enriches them. If our farmers, instead of laboring to double their acres would endeavor to double their crops, the world find it a vast saving of time and toil, and an increase of profits.

Many of them never think of digging ten inches into the soil, unless they have dreamed about a crock of gold hid in the earth; but if they would set about the work of digging in earnest, every man would find his crock of gold, without the aid of dreams and divination.

We have a great advantage over the British farmers in the fact that our farmers nearly all hold the lands which they cultivate, in fee simple, while in England they are chiefly tenants, hiring the lands of the nobility, paying enormous rents to the proprietors, besides heavy taxes to government. Taxes here are comparatively light, and our farmers are their own landlords. Hence they have been able to pay three-fold wages for labor to those paid in Europe, pay the costs of transportation, and yet undersell the British farmers in their own markets.

PEARS AND THEIR PRICES.

We learn from the best authority, that sales of pears have been actually made at Philadelphia this season at prices calculated to give an impetus to their culture beyond any former example. One remarkable specimen of *Duchess of Angoulême* pear was sold at Isaac Newton's Fruit and Ice Cream store, in Chestnut street, Philadelphia, for one dollar! and many specimens not so large, but very respectable in size, produced seventy-five cents each as soon as they were displayed in the window. Now this is very encouraging, certainly, to a man who can purchase a tree for from twenty-five to fifty cents, and sell the produce at even half or quarter the above prices. In addition, we are assured that Mr. Newton was selling a stock of *Vicar of Winkfield* pears, on December 24, 1852, at 75 cents a dozen, to eager buyers! Our correspondent says he immediately sat down and ordered pear trees for all the vacant spots he could find in his garden. We only add that we think him a sensible man.

[Am. Gardeners' Chronicle.

IMPROVEMENT IN BUTTER FIRKINS. Butter firkins, as at present constructed, require to be sawn horizontally through the centre, or the head removed, in order to obtain the butter, which is liable to be injured from the consequent exposure to the air. As an improvement on the above, a new method has been invented by Daniel Minthron, of Watertown, N. Y., who has taken measures to secure a patent. The firkin is made to consist of two parts, which are connected together by means of a taper flange on the core of the one, which fits into a corresponding recess cut inside the edge of the other, the two parts being kept firmly together with hooks or any other suitable fastening. The great advantage of a firkin of this description is that small quantities of butter can be taken out when required, and the firkin afterwards closed air-tight, which renders it superior to those of the ordinary construction for family use; moreover the firkin can be used repeatedly for the same purpose until it is completely worn out.

[Scientific American.

GARGET IN COWS. A farmer at Morris, N. Y. cures garget in cows as follows: "I have used the gargot root, or pokeweed, as it is commonly called, with success. A piece of the root, large as a kernel of corn, given with their food, cut fine, and twice a week, has always proved successful in two or three weeks."

[Germanstown Telegraph.

POULTRY MANURE.

This is the most valuable of the farm manures, and is entitled to great care in its collection and use. Beyond the amount of water it contains, it is as valuable as guano, and therefore should never be sold by practical farmers to morocco dressers, at 25 cents per bushel. The poultry-house should be underlaid with charcoal-dust, when it can be procured, so as to receive the hen manure as fast as made. The surface of this charcoal-dust should occasionally be raked or removed off to one corner, with a portion of the dung. This may be continued until the manure is required for use, when it should be thoroughly mixed with ten times its bulk of soil before being applied to crops. Where charcoal-dust cannot be procured, well decomposed swamp-muck, plaster of paris, or even aluminous clay, may be frequently dusted under the floor of the poultry-house, to be mixed with this manure. The object of all this is to receive and retain the ammonia, so as to prevent its liberation from injuring the health of the inmates of the poultry-house. All animals, man included, suffer from brooding the effluvia arising from their excreta, and this is particularly true of the feathered tribes. Their natural habits in the wild state cause them to pass through the upper strata of the atmosphere, and with such velocity as to readily rid themselves of the noxious gases given off by the surface of their bodies, and to be beyond any deleterious influence from the fumes of their excreta. We should, therefore, in the poultry-house, make such arrangements as will prevent the poultry from inhaling these deleterious gases.

[Working Farmer.

CAN INSECTS TALK?

A striking instance of the possession of a capability of spreading intelligence, and that of a somewhat abstruse character, is furnished by experiments that have been made by Huber and others upon bees. Every one is aware that the queen bee is an object of the greatest solicitude and attention to all the workers of the hive, and yet, among so many thousands, all busily employed in different and distant parts of the colony, it would appear impossible for them to ascertain, at least before the lapse of considerable time, whether she was absent from among them or not. In order to see whether bees had any power of conveying news of this kind, the queen bee had been stealthily and quietly abstract





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